What is Claimed Is:

1. An adjustable magnetic trip device for interrupting load current through a circuit breaker, the trip device comprising:

a magnetic pole in which a magnetic field is generated by the load current; and

an armature assembly comprising:

a bracket supported for movement toward and away from the magnetic pole;

a spring biasing the bracket to a position spaced from the magnetic pole;

an armature; and

a mount selectively positioning the armature on the bracket to adjust a gap between the armature and the magnetic pole.

2. The adjustable magnetic trip device of Claim 1, wherein the armature assembly includes an adjustment mechanism selectively adjusting the bias applied by the spring to the bracket, whereby the load current at which the magnetic field in the magnetic pole overcomes the bias applied by the spring and pulls the armature to the magnetic pole can be adjusted.

3. The adjustable magnetic trip device of Claim 1, wherein the mount comprises a hinge connection between the bracket and the armature and an adjustment member setting a hinge angle α between the armature and the bracket.

4. The adjustable magnetic trip device of Claim 3, wherein the adjustment member comprises a threaded rod having a neck on one end, and wherein one of the armature and the bracket has a tapped hole in which the threaded rod is threaded and the other has a slot capturing the neck.

5. The adjustable magnetic trip device of Claim 4, wherein the bracket is elongated with a first part of the hinge connection adjacent a first end, and one of the tapped hole and the slot adjacent a second end, and wherein the armature comprises an armature paddle, an extension extending from the armature paddle and having a free end with a second part of the hinge connection adjacent the free end, and with the other of the tapped hole and the slot on the extension between the free end and the armature paddle.

6. The adjustable magnetic trip device of Claim 3, wherein the bracket is elongated with a pivot member at a first end supporting the bracket for pivotal movement toward and away from the magnetic pole, and having a first part of the hinge connection adjacent the first end, and wherein the armature comprises an armature paddle and an extension extending from the armature paddle and having a free end with a second part of the hinge connection adjacent the free end.

7. The adjustable magnetic trip device of Claim 6, wherein the bracket has a T-shape at the first end to form the pivot member.

8. The adjustable magnetic trip device of Claim 7, wherein the bracket has a main body with an integral tab extending along each side toward the first end but offset from the main body and configured to form the first part of the hinge connection.

9. The adjustable magnetic trip device of Claim 8, wherein the second part of the hinge connection on the extension of the armature comprises a T-shaped free end on the extension, and wherein the tab on each side edge of the bracket is configured as a hook to form the first part of the hinge connection on which the T-shaped free end of the armature extension seats.

10. The adjustable magnetic trip device of Claim 9, wherein the adjustment member comprises a threaded rod having a neck on one end, and wherein one of the extension on the armature paddle and the main body of the bracket has a tapped hole in which the threaded rod is threaded and the other has a slot capturing the neck.

11. The adjustable magnetic trip device of Claim 10, wherein the one of the extension on the armature paddle and the main body of the bracket is the main body of the bracket which has the tapped hole and the other is the extension on the armature paddle that has the slot capturing the neck of the threaded rod.

12. The adjustable magnetic trip device of Claim 11, wherein the armature assembly includes an adjustment mechanism selectively adjusting the bias applied by the spring to the bracket, whereby the load current at which the magnetic field in the magnetic pole overcomes the bias applied by the spring and pulls the armature to the magnetic pole can be adjusted.

13. The adjustable magnetic trip device of Claim 8, wherein the integral tab extending along each side of the main body forms the T-shape of the first end of the bracket by being offset from the main body.

14. A circuit breaker comprising:

a housing;

separable contacts within the housing;

a line conductor and a load conductor connected through the separable contacts;

an operating mechanism within the housing operable to open the separable contacts when actuated; and

an adjustable magnetic trip device within the housing actuating the operating mechanism and comprising:

a magnetic pole adjacent the load conductor and in which a magnetic field is generated by load current passing through the load conductor;

a bracket mounted for pivotal movement toward and away from the magnetic pole;

a spring biasing the bracket to a position spaced from the magnetic pole;

an armature; and

a mount selectively positioning the armature on the bracket to adjust a gap between the armature and the magnetic pole without affecting the spring biased position of the bracket.

15. The circuit breaker of Claim 14, wherein the adjustable magnetic trip device further comprises an adjustment mechanism selectively adjusting the bias applied by the spring to the bracket, whereby the load current at which the magnetic field in the magnetic pole overcomes the bias applied by the spring and pulls the armature toward the magnetic pole can be adjusted.

16. The circuit breaker of Claim 15, wherein the mount comprises a hinge connection between the bracket and the armature and a threaded rod setting a hinge angle (α) between the armature and the bracket, the threaded rod having a neck

at one end and wherein one of the armature and the bracket has a tapped hole in which the rod is threaded and the other has a slot capturing the neck.